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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/932,361 | 08/17/2001 | Gerard Chauvel | TI-31362 | 4872 |

23494 7590 06/16/2004

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EXAMINER

HASHEM, LISA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2645

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,361

Applicant(s)

CHAUVEL ET AL.

Examiner

Lisa Hashem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/9-22-2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-15 are pending in this office action.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 5, is attached to the instant office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 recites the limitations "the steps" and "said plurality of processing modules" in line 2 and line 5 on page 21, respectively. There is insufficient antecedent basis for this limitation in the claim.

5. Claims 5 and 12 recite the limitation "said activities" in line 21 on page 21 and line 22 on page 22, respectively. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 15 recites the limitations "the tasks" and "said plurality of processing modules" in lines 10-11 on page 23. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-15 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S.

Patent No. 6,718,164 by Korneluk et al, hereinafter Korneluk.

Regarding claim 1, Korneluk discloses a method for controlling the execution of multiple tasks in a processing circuit including several (one or more) modules (see Abstract), comprising steps of: determining temperature-associated information at various areas of the processing circuit (column 2, line 66 – column 3, line 21); and executing the tasks on a plurality of processing modules responsive to said temperature-associated information to prevent problems associated with one or more areas exceeding a temperature threshold (column 3, line 22 – column 4, line 10).

Regarding claim 2, the method of claim 1 mentioned above, wherein Korneluk further discloses said determining step comprises the step of monitoring operations executed by said modules (column 3, lines 1-21).

Regarding claim 3, the method of claim 1 mentioned above, wherein Korneluk further discloses said determining step inherently comprises the step of calculating power dissipation information at various locations in said processing circuit (column 1, line 13 - column 2, line 15).

Regarding claim 4, the method of claim 1 mentioned above, wherein Korneluk

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further discloses said determining step comprises the step of calculating a current temperature at various locations in said processing circuit (column 1, lines 13-40; column 3, lines 22-48).

Regarding claim 5, the method of claim 1 mentioned above, wherein Korneluk further discloses said determining step inherently comprises the steps of: generating a task allocation scenario; estimating temperature-associated information for various locations in the processing circuit; computing the temperature associated with certain activities (column 4, lines 21-63).

Regarding claim 6, the method of claim 5 mentioned above, wherein Korneluk further discloses said step of generating a task allocation scenario inherently comprises the step of receiving a task list describing the tasks to be executed and a task model describing the tasks (see Figure 2B; column 4, lines 43-63).

Regarding claim 7, the method of claim 6 mentioned above, wherein Korneluk further discloses the task model inherently includes initial area-specific power dissipation estimates for each task (column 1, line 13 - column 2, line 15; column 12, lines 1-18).

Regarding claims 8-14, please see the rejections above for the method in claims 1-7, to reject the processing circuit in claims 8-14.

Regarding claim 15, Korneluk discloses a mobile communications device (see Abstract; Figure 7) comprising: an antenna for receiving and transmitting signals; and receiver/transmitter circuitry coupled to said antenna for sending and receiving audio and data signals (column 9, line 66 – column 10, line 13), said receiver/transmitter circuitry including a processing circuit comprising: circuitry for determining temperature-associated information at various areas of the processing circuit (column 10, lines 13-30); and circuitry for executing the tasks on a plurality of

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processing modules responsive to said temperature-associated information to prevent problems associated with one or more areas exceeding a temperature threshold (column 9, lines 16-36; column 10, line 44 – column 11, line 65).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 5,870,614 by Ang discloses power dissipated during operational use of an electronic circuit reveals itself as heat; wherein the invention relates to a control system to control power dissipation of a processing unit integrated in a semiconductor substrate

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
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Or faxed to:

(703) 872-9314 (for formal communications intended for entry)

Or call:

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (703) 305-4302. The examiner can normally be reached on M-F 8:30-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LH

lh

June 2, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read 'Fan Tsang', written in a cursive style.